

ABSTRACT OF THE DISCLOSURE

[0020] A method and apparatus for the dicing of semiconductor wafers using pressure to mechanically separate the individual die from the wafer without the use of a wafer saw. The method includes forming trenches along the scribe lines on a semiconductor wafer and then applying a mechanical pressure to the semiconductor wafer. The mechanical pressure causes a “clean break” of the wafer along the scribe lines, thereby singulating individual die on the wafer. The apparatus comprises a pad for supporting a semiconductor wafer and a positioning member to position the semiconductor wafer on the pad. A pressure mechanism is provided to apply a mechanical pressure to the wafer so as to singulate the individual die on the wafer.